

Photoemission experiments on polarized LSMO samples

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In this talk I will present the results of experiments dealing with photoemission from the half-metallic manganese perovskite LSMO ($\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$). In the first type of experiment we have applied the tool of Resonant Photoemission (RPE) at the L2L3 edge and we worked with circular polarized light. After careful sample preparation we obtained a nice dichroic signal for the L2L3 absorption. Working with a magnetized sample and circular polarized light we observe a clear effect of the helicity of light on the Raman-Augur Photoelectrons which correspond to the $\text{Mn}2p3p3d$ decay. We interpret this effect as a proof of halfmetallicity of our LSMO sample. Further on angle and spin resolved spectra from LSMO thin films will be discussed.

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